Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

1. (Currently Amended) A method of forming a plurality of two-way ~~radiation~~ beams using a transmit and receive system, the method comprising:

controlling a transmit antenna array of the transmit and receive system to provide a plurality of transmit ~~radiation~~ beams;

simultaneously forming a first plurality of receive beams via a beamformer network;

controlling a switched beam combining circuit of a receive antenna array of the transmit and receive system to form a second plurality of receive ~~radiation~~ beams wherein the controlling comprises combining selected ones of the formed beams via a switch network; and

combining predetermined ones of the plurality of transmit beams and predetermined ones of the second plurality of receive beams to form the plurality of two-way ~~radiation~~ beams.

2. (Currently Amended) The method of claim 1, wherein controlling the transmit antenna array includes controlling a beam switching system coupled to the transmit antenna array to provide the plurality of transmit ~~radiation~~ beams.

3. (Currently Amended) The method of claim 1, wherein controlling the switched beam combining circuit of the receive antenna array includes controlling a plurality of single-pole, multi-throw switches ~~beam combining system coupled to the receive antenna array~~ to provide the second plurality of receive ~~radiation~~ beams.

4. (Currently Amended) The method of claim 1, wherein combining includes combining a first transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with ~~a first~~ at least one of the second plurality of ~~receive radiation beam of the plurality of~~ receive ~~radiation~~ beams to provide a first one ~~two way radiation beam~~ of the plurality of two-way ~~radiation~~ beams.

5. (Currently Amended) The method of claim 4, wherein combining further includes combining the first transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with a second receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a second one~~two-way radiation beam~~ of the plurality of two-way ~~radiation~~ beams.

6. (Currently Amended) The method of claim 5, wherein combining further includes combining a second transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with the second receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a third two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

7. (Currently Amended) The method of claim 6, wherein combining further includes combining the second transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with a third receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a fourth two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

8. (Currently Amended) The method of claim 7, wherein combining further includes combining the second transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with a fourth receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a fifth two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

9. (Currently Amended) The method of claim 8, wherein combining further includes combining a third transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with the fourth receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a sixth two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

10. (Currently Amended) The method of claim 9, wherein combining further includes combining the third transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with a fifth receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a seventh two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

11. (Currently Amended) The method of claim 10, wherein combining further includes combining the third transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with a sixth receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide an eighth two-

way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

12. (Currently Amended) The method of claim 11, wherein combining further includes combining a fourth transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with the sixth receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a ninth two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

13. (Currently Amended) The method of claim 12, wherein combining further includes combining the fourth transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with a seventh receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a tenth two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

14. (Currently Amended) The method of claim 4, wherein combining further includes combining a second transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with the first receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a second two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

15. (Currently Amended) The method of claim 14, wherein combining further includes combining the second transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with a second receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a third two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

16. (Currently Amended) The method of claim 15, wherein combining further includes combining a third transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with the second receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a fourth two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

17. (Currently Amended) The method of claim 16, wherein combining further includes combining the third transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with a third receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a fifth two-

way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

18. (Currently Amended) The method of claim 17, wherein combining further includes combining a fourth transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with the third receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a sixth two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

19. (Currently Amended) The method of claim 18, wherein combining further includes combining the fourth transmit ~~radiation~~ beam of the plurality of transmit ~~radiation~~ beams with a fourth receive ~~radiation~~ beam of the plurality of receive ~~radiation~~ beams to provide a seventh two-way ~~radiation~~ beam of the plurality of two-way ~~radiation~~ beams.

20. (Currently Amended) A transmit and receive system comprising:

a first array including a first plurality of antenna element disposed to provide a transmit antenna;

a second array including a second plurality of antenna elements disposed to provide a receive antenna;

a beam switching system coupled to the first array and being operative to form a plurality of transmit beams; and

a beam combining system coupled to the second array and being operative to simultaneously form a plurality of receive beams, wherein predetermined one of the plurality of transmit beams and predetermined ones of the plurality of receive beams are combined to form a plurality of two-way beams.